

**REMARKS**

Claims 42, 44-48, 50-55 and 57-63 are pending in this application. By this Amendment, claims 43, 49 and 56 are cancelled and claims 42, 46-48, 50, 55, 57, 58 and 60-63 are amended. Support for the amendments to claims 42 and 55 can be found, for example, in the instant specification at page 12, lines 27 to 36, page 40, line 37 to page 41, line 2, and in original claims 42 and 55. Support for the remaining amendments can be found, for example, in the original claims. No new matter is added in view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**Request for Personal Interview**

Applicants respectfully request that the Examiner contact the undersigned by telephone to schedule a personal interview before taking further action in this application.

**Rejection Under 35 U.S.C. §102**

The Office Action rejects claims 42-63 under 35 U.S.C. §102(b) over WO98/08216 to Shimose et al. ("Shimose"). By this Amendment, claims 43, 49 and 56 are cancelled, rendering the rejection moot as to those claims. As to the remaining claims, Applicants respectfully traverse the rejection.

The citations to Shimose in the Office Action refer to its English-language counterpart, U.S. Patent No. 6,203,918. Applicants' citations to Shimose herein, likewise, also refer to the English-language counterpart.

Claim 42 recites "[a] laminate having ... a first resin layer and a second resin layer; the first resin layer has a first etching rate when etched with an alkali-amine solution and the second resin layer has a second etching rate when etched with the alkali-amine solution; and a ratio of the first etching rate to the second etching rate is from 4:1 to 1:1" (emphasis added). Claim 55 recites "[a]n insulating film comprising at least a first resin layer and a second resin

layer, wherein: the first resin layer has a first etching rate when etched with an alkali-amine solution and the second resin layer has a second etching rate when etched with the alkali-amine solution; and a ratio of the first etching rate to the second etching rate is from 4:1 to 1:1" (emphasis added). Shimose does not teach or suggest such a laminate or such an insulating film.

The Office Action asserts that Shimose discloses laminates including a stainless steel substrate and an insulative polyimide layer having two or three polyimide layers. The Office Action further asserts that Shimose discloses that the insulating layers can have ratios of etching rates of, for example, 1.09:1 and 1.19:1. Notwithstanding these assertions, Shimose does not teach or suggest the laminate of claim 42 or the insulating film of claim 55.

Each of claims 42 and 55 includes an insulator including a first resin layer and a second resin layer, where the first resin layer has a first etching rate when etched with an alkali-amine solution, the second resin layer has a second etching rate when etched with an alkali-amine solution, and a ratio of the first etching rate to the second etching rate is from 4:1 to 1:1. The Office Action relies on the Examples of Shimose to support its assertion that Shimose discloses that resin layers in an insulator can have ratios of etching rates of, for example, 1.09:1 and 1.19:1. However, the etching rates for the resin layers disclosed in the Examples of Shimose are the etching rates for hydrazine. See Shimose, column 8, lines 61 to 62. The etching rates for the resin layers in claims 42 and 55 are etching rates for an alkali-amine solution. There is no disclosure in Shimose regarding etching rates for alkali-amine solutions, much less the particular ratios of etching rates for alkali-amine solutions required by claims 42 and 45.

Moreover, there is no disclosure in Shimose to suggest that the disclosed etching rates for hydrazine are in any way predictive of etching rates for alkali-amine solutions -- one of ordinary skill in the art would not expect that the etching rates for multiple etchants would be

identical from etchant to etchant. Shimose does not provide any teaching or suggestion with respect to selecting ratios of etching rates of resin layers in an insulator for any etchant. The alleged disclosure regarding ratios etching rates for hydrazine is, rather, extrapolated by the Office Action from data in the Examples of Shimose. The Office Action asserts that Shimose teaches particular ratios, but does not (and can not) assert that Shimose suggests selecting those ratios. Shimose does not provide any data regarding etching rates for alkali-amine solutions and, thus, it is not possible to even extrapolate ratios of such etching rates, much less discern any teaching or suggestion regarding the desirability of those ratios.

The present inventors, by contrast, have achieved unexpected and desirable results by selecting for etching rates in resin layers of an insulator. In particular, by selecting resin layers based on alkali-amine solution etching rates, as in claims 42 and 55, it is possible to obtain a laminate having a good shape, and that can be continuously etched. *See* instant specification, page 40, line 26 to page 41, line 1. Shimose provides no teaching or suggestion regarding avoidance of problems, such as shown in FIG. 1 of the instant specification. Further, keying ratios of etching rates to alkali-amine solutions, rather than etchants such as hydrazine, represents a move away from reliance on highly toxic chemicals.

Applicants have attached hereto the Declaration of Katsuya Sakayori to supplement the Declaration filed October 12, 2004. The present Declaration provides further evidence of the inoperability of Shimose as a reference. The present Declaration shows that when precisely following the synthetic pathway outlined in Synthetic Example 2 of Shimose, a gel, which can not be used to form a laminate, is obtained. *See* present Declaration, pages 3 to 4. This result supplements the result in the October 12, 2004 Declaration, by showing that the scaled use of reactants in the October 12, 2004 Declaration (from which the same gel was obtained by replicating Synthetic Example 2) accurately reflects the results that are achieved when reproducing the experimental procedures set forth in Shimose without scaling.

The Office Action asserts that "[t]he applicants were not able to follow the references guidelines, since the materials of the applicant[s] experiments formed an unprocessable viscous composition." *See* November 29, 2004 Office Action, paragraph 5. Following this logic, Applicants could never show the inoperability of a reference because such a showing would be evidence that the showing was faulty. The reason that applicants obtained an unprocessable viscous composition was because the experimental procedures of Shimose are faulty. The variations in procedure (e.g., doubling the amount of solvent in Synthetic Example 2 of the October 12, 2004 Declaration) were made precisely because experimental procedures of Shimose are faulty -- in an effort to make the "certain experiments and adaptations, within the skill of the competent worker," to demonstrate the inoperability of the Shimose Examples even with modifications within the skill of an ordinary artisan. *See* MPEP §716.07.

While Applicants were unable to reproduce each and every Example in Shimose, there is no requirement that they do so. The present Declaration and the October 12, 2004 Declaration plainly demonstrate that synthesizing resin layers according to four of the six Synthetic Examples provides samples that having etching rates that vary widely from the etching rates reported in Shimose. The Synthetic Examples of Shimose cannot be repeated, and thus it is not possible to rely on their results as the basis of an anticipation rejection.

For the foregoing reasons, Shimose does not teach or suggest each and every feature of claims 42 and 55.

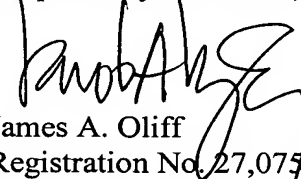
Shimose does not anticipate claims 42 and 55. Claims 44-48, 50-54 and 57-63 depend variously from claims 42 and 55 and, thus, also are not anticipated by Shimose. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

#### Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 42, 44-48, 50-55 and 57-63 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:JAD/hs

Attachment:

Declaration of Katsuya Sakayori

Date: May 31, 2005

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